## P. ENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference  | FOR FURTHER   | see Form PCT/ISA/220   |  |  |  |
|--|---|--|--|--|--|
| FPC04015-PCT   | ACTION  | as well as, where applicable, item 5 below.  |  |  |  |
| International application No.  | International filing date (day/mont   | h/year) (Earliest) Priority Date (day/month/year)  |  |  |  |
| PCT/KR2004/001090  | 12 MAY 2004 (12.05.2004)  | 16 MAY 2003 (16.05.2003)   |  |  |  |
| Applicant  |   |  |  |  |  |
| LG CHEM, LTD. et al  |   |  |  |  |  |
| This International search report has been prep to Article 18. A copy is being transmitted to the |   | g Authority and is transmitted to the applicant according  |  |  |  |
| This international search report consists of a t   | total of 3 sheets.  |  |  |  |  |
| It is also accompanied by a cop  | y of each prior art document cited in   | n this report.   |  |  |  |
| language in which it was filed, unles  | ss otherwise indicated under this iter<br>was carried out on the basis of a tra | n the basis of the international application in the n.  In the basis of the international application furnished to |  |  |  |
|  |   | sed in the international application, see Box No. I.   |  |  |  |
| 2. Certain claims were found un  | searchable (See Box No. II)   |  |  |  |  |
| 3. Unity of invention is lacking (   |   |  |  |  |  |
| 4. With regard to the title,   | •   |  |  |  |  |
| X the text is approved as submitted  | d by the applicant.   |  |  |  |  |
|  | this Authority to read as follows:  |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
| 5. With regard to the abstract,  |   |  |  |  |  |
| X the text is approved as submitted  | d by the applicant.   |  |  |  |  |
| the text has been established, ac  | cording to Rule 38.2(b), by this Aut  | hority as it appears in Box No. IV. The applicant  |  |  |  |
| may, within one month from the   | date of mailing of this internationa  | I search report, submit comments to this Authority.  |  |  |  |
| 6. With regard to the drawings,  |   |  |  |  |  |
| a. the figure of the drawings to be publ   | ished with the abstract is Figure No  | ·  |  |  |  |
| as suggested by the application  | ant.  |  |  |  |  |
| because the applicant failed to suggest a figure.  |   |  |  |  |  |
| because this figure better of  | haracterizes the invention.   |  |  |  |  |
| b. none of the figure is to be publis  | shed with the abstract.   |  |  |  |  |
|  |   |  |  |  |  |

International application No. PCT/KR2004/001090

### A. CLASSIFICATION OF SUBJECT MATTER

#### IPC7 C08F 283/04, C08F 212/08

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC7 C08F 283/04, C08F 212/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for invention since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used) CA-on CD, PAJ, KIPASS

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages               | Relevant to claim No. |
|-----------|--|-----------------------|
| Y         | JP 06-248017 A (MONSANT KASEI KK ) 06 September 1994 see the whole documents                     | 2,5,8,13              |
| Y         | US 5,444,041 A (ARCO CHEM TECH ) 15 August 1995 see the whole documents                          | 2,5,8,13              |
| Y         | JP 2002-146038 A (MITSUBISHI CHEMICALS CORP) 22 May 2002 see the whole documents                 | 2,5,8,13              |
| A         | JP 06-87932 A (NIPPON SHOKUBAI CO LTD ) 29 March 1994 see the whole documents                    | 1-13                  |
| A         | EP 0735051 A1 (XEROX CORP) 02 October 1996 see the whole documents                               | 1-13                  |
| A         | US 2002/0052456 A1 (Sabine Beuermann, Michael Buback et al.) 02 May 2002 see the whole documents | 1-13                  |
|           |  |                       |
|           |  |                       |

|  | Further | documents | are listed | in the | continuation of | Box C. |
|--|---------|-----------|------------|--------|-----------------|--------|
|--|---------|-----------|------------|--------|-----------------|--------|

X See patent family annex.

- \* Special categories of cited documents:
- 'A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

20 AUGUST 2004 (20.08.2004)

Date of mailing of the international search report

21 AUGUST 2004 (21.08.2004)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Suk Ju

Telephone No. 82-42-481-8149



## INTERNATION... SEARCH REPORT

Information on patent family members

international application No.

PCT/KR2004/001090

| Patent document cited in search report | Publication<br>date | Patent family member(s)  | Publication date   |
|--|---------------------|--|--|
| JP 06-87932 A                          | 29.03.1994          | None   |  |
| JP 2002-146038 A                       | 22.05.2002          | None   | ·  |
| US 5442041 A                           | 15.08.1995          | AT177760T<br>CA2166638A1<br>DE69601739D1<br>DE69601739T2<br>EP0722954A2<br>ES2128820T3<br>US5442041A | 15.04.1999<br>20.07.1996<br>22.04.1999<br>15.07.1999<br>24.07.1996<br>16.05.1999<br>15.08.1995 |
| JP 06-248017 A                         | 06.09.1994          | None   |  |
| EP0735051 A1                           | 02.10.1996          | EP0735051A1<br>JP8269107A  | 02 . 10 . 1996<br>15 . 10 . 1996   |
| US 2002/0052456 A1                     | 02.05.2002          | JP2002201205 A2<br>EP1201682 A9<br>DE10054114 A1   | 19.07.2002<br>31.07.2002<br>16.05.2002   |